#### Before the

# Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning Deployment of Advanced	)	GN Docket No. 18-238
Telecommunications Capability to All	)	
Americans in a Reasonable and Timely	)	
Fashion	)	

## REPLY COMMENTS OF ADTRAN, INC.

ADTRAN, Inc. ("ADTRAN") takes this opportunity to reply to several of the comments on the Commission's *Notice of Inquiry* regarding the Fourteenth Broadband Progress Report undertaken pursuant to Section 706 of the Telecommunications Act of 1996.<sup>1</sup> In its initial Comments, ADTRAN endorsed the Commission's proposal to follow the precedent of the previous Broadband Progress Report, and evaluate whether progress towards ubiquitous deployment of "advanced services" was occurring in a "reasonable and timely" fashion.<sup>2</sup> In addition, ADTRAN urged the Commission to continue using the benchmark of 25/3 Mbps as a proxy for Section 706's use of the term "advanced services." A few of the commenting parties took differing positions, but as explained below, their arguments are not justified.

Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 18-238, FCC 18-119, released August 9, 2018 (hereafter cited as "Notice of Inquiry"). The Commission subsequently extended the dates for comments and replies in this proceeding. Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 18-238, DA 18-859, released August 17, 2018.

<sup>&</sup>lt;sup>2</sup> 47 U.S.C. § 1302. Section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996), as amended by the Broadband Data Improvement Act, Pub. L. No. 110-385, 122 Stat. 4096 (2008), as codified in Title 47, Chapter 12 of the United States Code. *See* 47 U.S.C. § 1301 *et seq*.

## Setting the Benchmark

In contrast to ADTRAN's advocacy of retaining the 25/3 Mbps benchmark, a few of the commenting parties urged the Commission to increase the benchmark dramatically. The Open Technology Institute ("OTI") suggested that the Commission should adopt a benchmark of 100 Mbps (symmetrical).<sup>3</sup> But they justify their claim for a higher benchmark based on looking towards future needs, while at the same time urging the Commission not to consider technologies that are being deployed presently in meeting those future needs.<sup>4</sup>

The Central Coast Broadband Consortium ("CCBC") proposes a benchmark of 100/20 Mbps.<sup>5</sup> However, their suggested benchmark is based on a survey of business and residential customers as to what they consider their "ideal speed." They did not attempt to assess the factors derived from the statutory definition of "advanced services" that the Commission used in setting the current benchmark – the applications used by consumers and the broadband services purchased by consumers – or whether anything had changed significantly in the last year to alter that analysis. As ADTRAN explained in its comments, the absence of any real change in these factors supports retention of the 25/3 Mbps benchmark for this year's assessment.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> OTI Comments at pp. 30-32.

OTI Comments at p. 30 ("The Commission should look towards future Commission needs in setting throughput benchmarks"). In contrast, OTI urges the Commission not to consider future technologies, such as 5G, in conducting the broadband deployment analyses under Section 706. OTI Comments at pp. 27-28.

<sup>&</sup>lt;sup>5</sup> CCBC Comments at p. 2.

<sup>&</sup>lt;sup>6</sup> CCBC Comments at p. 8.

ADTRAN Comments at pp. 5-6.

Several other commenting parties also urged a 100 Mbps download benchmark, with varying upload benchmarks. The Power & Communication Contractors Association ("PCCA") suggested a 100/100 Mbps benchmark as a "future proof" standard.<sup>8</sup> PCCA endorses the sentiment of Commissioner Rosenworcel, who calls for the Commission to be "bold" in adopting a 100 Mbps benchmark. The Communications Workers of America ("CWA") proposes a 100/10 Mbps benchmark, calling the current benchmark "insufficiently audacious".<sup>9</sup> And Common Cause/Public Knowledge urges the Commission to adopt a 100 Mbps downstream benchmark, claiming that the Broadband Data Improvement Act ("BDIA") calls for a forward-looking benchmark.<sup>10</sup> However, the BDIA did not alter the Section 706 definition of "advanced services" -- "high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology."<sup>11</sup> Rather, the BDIA directed the Commission to examine more granular data, including assessing current usage levels, broadband speeds purchased by consumers and common applications, which are used to set the benchmark.<sup>12</sup>

the future.").

CONSUMER SURVEY OF BROADBAND SERVICE CAPABILITY.— (1) IN GENERAL.—For the purpose of evaluating, on a statistically significant basis, the national characteristics of the use of broadband service capability, the Commission shall conduct and make public periodic surveys of consumers in urban, suburban, and rural areas in the large business, small business, and residential consumer markets to

PCCA Comments at p. 2 ("Pursuing 'future proof' speeds of 100/100 Mbps would allow for technological advancements and meet demand for the simultaneous use of multiple mobile devices in businesses, schools, hospitals, first responders, and American homes today and into

<sup>&</sup>lt;sup>9</sup> CWA Comments at p. 3.

<sup>&</sup>lt;sup>10</sup> Common Cause/Public Knowledge Comments at pp. 4-7.

<sup>&</sup>lt;sup>11</sup> 47 U.S.C. § 1302(d)(1).

<sup>&</sup>lt;sup>12</sup> Section 103(c):

Incompass would go even further, proposing that the Commission adopt 1 Gigabit per second as the benchmark. Encompass urges the Commission to be "bold," and "adopt a future proof definition of broadband for our nation." As ADTRAN has explained previously, it would be anomalous to use a forward-looking benchmark but backwards-looking deployment data. ADTRAN believes the Commission can and should be bold in adopting aspirational goals for broadband deployment, but that is not the role of the benchmarks for purposes of the Section 706 analysis. ADTRAN's products support the much higher speeds -- 100 Mbps, 1 Gbps and even 10 Gbps -- that are now being deployed due to competition. But ADTRAN still believes that

The Commission should respectfully decline to take up Commissioner Jessica Rosenworcel's idea of suddenly increasing its broadband benchmark standard from 25 Mbps up to 100 Mbps. Section 706 simply requires the Commission to annually determine and issue a report on "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion." The statute does not direct the Commission to be "audacious" or to shoot for the moon.

To some, cranking up the Commission's speed benchmark by 400% might sound like visionary regulatory policy. But the Section 706 process was not intended to be an exercise of the agency's imagination of what the future would be like if the FCC had unfettered powers and unlimited resources to shape the course of broadband deployment. Instead, Section 706 implies a realistic analysis that takes stock of actual market data regarding deployment of infrastructure and the availability of advanced capabilities that a substantial majority or at least an early majority of consumers subscribe to.

determine— (A) the types of technology used to provide the broadband service capability to which consumers subscribe; (B) the amounts consumers pay per month for such capability; (C) the actual data transmission speeds of such capability; (D) the types of applications and services consumers most frequently use in conjunction with such capability; (E) for consumers who have declined to subscribe to broadband service capability, the reasons given by such consumers for declining such capability; (F) other sources of broadband service capability which consumers regularly use or on which they rely; and (G) any other information the Commission deems appropriate for such purpose.

Incompass Comment s at p. 4.

See also, Free State Comments at p. 7:

25/3 Mbps is currently an appropriate benchmark consistent with the Congressional directives in Section 706.

The Commission in the National Broadband Plan adopted in 2010 did set audacious goals for that time: "As such, 100 million US homes should have affordable access to actual download speeds of at least 100 Mbps and actual upload speeds of at least 50 Mbps by 2020." And we seem to be on track to meet that goal. Perhaps the Commission should begin an update to that 2010 National Broadband Plan to set new aspirational goals. But it should not do so using the Section 706 Inquiry process of setting benchmarks for "advanced telecommunications services."

## **Assessing Progress**

In its initial comments, ADTRAN lauded the Commission for undertaking the assessment that Congress specified:

The *Notice of Inquiry* continues the recent determination that in conducting the annual assessment of advanced services deployment mandated by Congress, the Commission should focus on the nature of the progress being made towards achieving the goal of universal availability. The Commission's analysis should not be simply "are we there yet?" – with "there" being the goal of 100% coverage.<sup>16</sup>

A few of the commenting parties instead would have the Commission make a negative determination if the goal of 100% availability has not been achieved.

OTI and Common Cause/Public Knowledge suggest that the Commission should abandon it use of looking at year-over-year progress, but instead should go back to earlier Section 706 inquires where it simply assessed whether advanced telecommunications services

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Connecting America: The National Broadband Plan, <a href="https://www.fcc.gov/general/national-broadband-plan">https://www.fcc.gov/general/national-broadband-plan</a>, at Chapter 2, p. 9.

ADTRAN Comments at p. 4.

were available everywhere.<sup>17</sup> But that position ignores the language that Congress specified in the statute – the Commission is directed to assess "whether advanced telecommunications capability *is being deployed* to all Americans *in a reasonable and timely fashion.*" <sup>18</sup>

CWA in its comments concludes that "broadband is not being deployed in a reasonable and timely fashion." However, CWA's argument conflates broadband adoption with broadband deployment. Congress asked the Commission on an annual basis to assess broadband deployment. The statute does not direct the Commission to conduct an annual assessment of broadband adoption.

OTI also seeks to create another hurdle to the Commission's making of an affirmative determination in its Section 706 review by specifying that a single provider of advanced services to a location is insufficient. According to OTI, there must be multiple service providers for it to

OTI comments at pp. 15-17; Common Cause/Public Knowledge Comments at pp. 14-16.

<sup>(</sup>Emphasis added) 47 U.S.C. § 1302. Section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996), as amended by the Broadband Data Improvement Act, Pub. L. No. 110-385, 122 Stat. 4096 (2008), as codified in Title 47, Chapter 12 of the United States Code. *See* 47 U.S.C. § 1301 *et seq. See also*, CTIA Comments at p. 4 (citations omitted):

Congress required the agency to report on an annual basis "whether advanced telecommunications capability *is being deployed* to all Americans in a reasonably timely fashion." This formulation in the annual reporting requirement indicates that Congress intended for the Commission to report on the ongoing progress of deployment. Were it Congress's intent to seek Commission input on the *completeness* of deployment, Congress would be expected to direct the Commission to report on whether advanced telecommunications capability "has been" deployed in a reasonable and timely fashion—which it did not. CTIA therefore agrees with the proposal in the *NOI* that the Commission conduct this inquiry, as it did last year, by measuring progress over the past five years.

<sup>&</sup>lt;sup>19</sup> CWA Comments at p. 2.

constitute an adequate baseline for reasonable and timely deployment.<sup>20</sup> While a highly competitive marketplace is desirable, the Commission cannot overcome the laws of economics. For some areas, the terrain and population density make it uneconomical for multiple entrants (and at times even for one entrant). The Commission is addressing this through its broadband subsidy programs. But it would be exceedingly inefficient to subsidize multiple providers to create synthetic competition. There appear to be solutions in the not-too-distant future for additional competitive entry in the broadband market with the expected widespread deployment of 5G wireless services<sup>21</sup> and mega-constellations of low-Earth orbit satellites.<sup>22</sup> But that should not preclude the Commission from finding now that advanced telecommunications services are being deployed in a reasonable and timely fashion, even if a customer is only served by a single provider at the benchmark speeds.

#### Conclusion

In some of the previous Section 706 Inquiries, the Commission "moved the goalposts" and created unnecessary hurdles to an affirmative determination, because of a desire to use a

OTI Comments at pp. 18-19.

Indeed, the Commission is taking multiple steps to accelerate the deployment of 5G. https://www.fcc.gov/document/fccs-5g-fast-plan.

These mega-constellations of low-Earth orbit satellites overcome the problem of latency faced by geostationary satellites, and the frequency re-use should allow for significant capacity. Viasat in its comments at pp. 6-7 contends that the capacity constraints of current geostationary satellite broadband are of no moment, because all broadband technologies have constraints/congestion. However, Viasat's argument ignores a very significant difference between terrestrial and satellite broadband services. Most terrestrial systems can expand capacity relatively quickly and efficiently, whereas expanding geostationary satellite broadband capacity requires deployment of a new satellite, which is very expensive and takes many years for licensing, construction and launch.

negative Section 706 finding as the substantive authority for adopting "net neutrality" rules. <sup>23</sup> The Commission's *Restoring Internet Freedom* order has eliminated any such motivation for stacking the deck against an affirmative finding. The Commission should likewise reject these commenters' attempts to justify a negative Section 706 determination by increasing the benchmarks, requiring 100% availability and adoption, or requiring multiple providers at each location.

Respectfully submitted, ADTRAN, Inc.

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See, Comments of ADTRAN in GN Docket No. 15-191, filed September 15, 2015, at pp. 6-10.